

What is claim d is:

1. A method for recording digital data streams to a recording medium, the method comprising the steps of:

recording a received digital data stream of data packet units by grouping the data packet units into program units; and

creating and recording entry information pertaining to entry points of the digital data stream.

2. The method of claim 1, wherein the data packet units include video data packets containing video data.

3. The method of claim 2, wherein the program units constitute a program carried on the received digital data stream.

4. The method of claim 1, wherein the entry information is recorded on the recording medium.

5. The method of claim 4, wherein the recording medium is a DVD.

6. A recording medium for recording digital data streams, the recording medium comprising:

a recording layer;

a digital data stream of data packet units stored on the recording

layer, wherein the data packet units are grouped into program units; and
entry information pertaining to entry points of the digital data stream
and stored on the recording layer for accessing data of the digital data
stream.

7. The recording medium of claim 6, wherein the data packet units
include video data packets containing video data.

8. The recording medium of claim 7, wherein the program units
constitute a program carried on the digital data stream.

9. The recording medium of claim 6, wherein the recording medium is
a DVD.

10. An apparatus for recording digital data streams to a recording
medium, the apparatus comprising:

means for recording a received digital data stream of data packet units
by grouping the data packet units into program units; and

means for creating and recording entry information pertaining to entry
points of the digital data stream.

11. The apparatus of claim 10, wherein the data packet units include
video data packets containing video data.

12. The apparatus of claim 11, wherein the program units constitute a program carried on the received digital data stream.

13. The apparatus of claim 10, wherein the entry information is recorded on the recording medium.

14. The apparatus of claim 13, wherein the recording medium is a DVD.

15. A method for recording digital data streams to a recording medium, the method comprising the steps of:

grouping data of a digital data stream into a plurality of object units;

recording the object units on the recording medium, wherein the object units are organized into cells; and

creating and recording entry information pertaining to entry points of the digital data stream.

16. The method of claim 15, wherein the object units contain video data.

17. The method of claim 15, wherein the entry information is recorded on the recording medium.

18. The method of claim 17, wherein the recording medium is a DVD.

19. A recording medium for recording digital data streams, the recording medium comprising:

a recording layer;

a plurality of object units representing groups of data of a digital data stream and stored on the recording layer, wherein the object units are organized into cells; and

entry information pertaining to entry points of the digital data stream and stored on the recording layer.

20. The recording medium of claim 19, wherein the object units contain video data.

21. The recording medium of claim 19, wherein the recording medium is a DVD.

22. An apparatus for recording digital data streams to a recording medium, the apparatus comprising:

means for grouping data of a digital data stream into a plurality of object units

means for recording the object units on the recording medium, wherein the object units are organized into cells; and

means for creating and recording entry information pertaining to entry points of the digital data stream.

23. The apparatus of claim 22, wherein the object units contain video data.

24. The apparatus of claim 22, wherein the entry information is recorded on the recording medium.

25. The apparatus of claim 24, wherein the recording medium is a DVD.

26. A method for recording digital data streams to a recording medium, the method comprising the steps of:

grouping data of a digital data stream into a plurality of object units;

recording the object units on the recording medium, wherein the object units are organized into cells;

creating and recording entry information pertaining to entry points of the digital data stream; and

creating map information for accessing the data of the digital data stream,

wherein the map information includes access time information and object unit information associated with the object units.

27. The method of claim 26, wherein the object units contain video data.

28. The method of claim 26, wherein the entry information and the map information are recorded on the recording medium.

29. The method of claim 28, wherein the recording medium is a DVD.

30. The method of claim 26, wherein the object unit information includes object unit size information and object unit presentation time information associated with each of the object units.

31. The method of claim 30, wherein the object unit size information of an object unit identifies a size of that object unit.

32. The method of claim 30, wherein the object unit presentation time information of an object unit identifies a playing time of that object unit.

33. The method of claim 26, wherein the access time information includes a plurality of index numbers each associated with one of the object units.

34. The method of claim 33, wherein the access time information further includes location information for each of certain object units.

35. The method of claim 34, wherein the access time information

further includes time duration information identifying a time duration between two start presentation time positions associated with the data.

36. A recording medium for recording digital data streams, the recording medium comprising:

a recording layer;

a plurality of object units representing groups of data of a digital data stream and stored on the recording layer, wherein the object units are organized into cells;

entry information pertaining to entry points of the digital data stream and stored on the recording layer; and

map information stored on the recording layer, for accessing the data of the digital data stream,

wherein the map information includes access time information and object unit information associated with the object units.

37. The recording medium of claim 36, wherein the object units contain video data.

38. The recording medium of claim 36, wherein the recording medium is a DVD.

39. The recording medium of claim 36, wherein the object unit information includes object unit size information and object unit

presentation time information associated with each of the object units.

40. The recording medium of claim 39, wherein the object unit size information of an object unit identifies a size of that object unit.

41. The recording medium of claim 39, wherein the object unit presentation time information of an object unit identifies a playing time of that object unit.

42. The recording medium of claim 36, wherein the access time information includes a plurality of index numbers each associated with one of the object units.

43. The recording medium of claim 42, wherein the access time information further includes location information for each of certain object units.

44. The recording medium of claim 43, wherein the access time information further includes time duration information identifying a time duration between two start presentation time positions associated with the data.

45. An apparatus for recording digital data streams to a recording medium, the apparatus comprising:

means for grouping data of a digital data stream into a plurality of object units;

means for recording the object units on the recording medium, wherein the object units are organized into cells;

means for creating and recording entry information pertaining to entry points of the digital data stream; and

means for creating map information for accessing the data of the digital data stream,

wherein the map information includes access time information and object unit information associated with the object units.

46. The apparatus of claim 45, wherein the object units contain video data.

47. The apparatus of claim 45, wherein the entry information and the map information are recorded on the recording medium.

48. The apparatus of claim 47, wherein the recording medium is a DVD.

49. The apparatus of claim 45, wherein the object unit information includes object unit size information and object unit presentation time information associated with each of the object units.

50. The apparatus of claim 49, wherein the object unit size information of an object unit identifies a size of that object unit.

51. The apparatus of claim 49, wherein the object unit presentation time information of an object unit identifies a playing time of that object unit.

52. The apparatus of claim 45, wherein the access time information includes a plurality of index numbers each associated with one of the object units.

53. The apparatus of claim 52, wherein the access time information further includes location information for each of certain object units.

54. The apparatus of claim 53, wherein the access time information further includes time duration information identifying a time duration between two start presentation time positions associated with the data.